**Peer Review Assignment**

**Objective**

Constructively and critically review, comment and edit a paper that was written by one of your peers. Your review will provide constructive criticism to the writer on the quality and presentation of the paper ideas and data. When critically reviewing another person’s paper, remember that you are not negatively affecting them, but rather, you are helping them by giving them an opportunity to improve their paper before the final grade.

We will make this a double-blind review so that you don’t know who will review your paper and the review does not know which paper they received.

Once you have completed your Peer Review Assignment, you will have the chance to edit your own paper that has been reviewed. Your final version will be turned in and graded along with your Peer Review Assignment.

**Due Date:** Monday February 25th at Midnight

**Rules of Peer Review**

* You will be graded on how effectively you review the paper. If you provide a critical, constructive and thorough review, you will receive an excellent grade.
* You will not be graded on your own paper that you are submitting until you turn in your final revision – at that time, we will compare your peer-reviewed draft with your final paper. If you have addressed the comments from your reviewers, you will get a better grade than if you have not addressed those comments.

**Instructions**

The original Lab Reports were submitted to the **DROPitTOme** site as:

**JDS297\_JonasSalk\_021313\_BeersLawReportOriginal.docx**

Once they have been ‘prepped’ by the VDS Staff for double blind peer review, they will be in this format:

**001\_BeersLawReport.docx**

1. Download the above document from BlackBoard site in the

/CourseDocuments 🡪PeerReviewReports 🡪 **ToBeReviewedReports** folder. You will know which file to get by looking at the table on the Wikispaces page:

<http://vdsstream.wikispaces.com/PeerReviewSp13>

Check if the "**Anonymous Reviewer Comments”**  sub-section is missing from the END of the paper – go ahead and add it in. You can see a copy of it at the bottom of this assignment.

1. Make edits/comments in green/blue font (or various colors of highlighter) according to the "**Anonymous Reviewer Comments”.**  You can type directly in the paper – or put your comments after each question at the end.

After you have reviewed it then save it as:

**001\_BeersLawReport\_Reviewed.docx**

Then upload this file to the **DROPitTOme** site. Passwerd: virtual214

<http://www.dropitto.me/vdsclass>

1. The files will then be ‘prepped’ again and placed in the BlackBoard site for retrieval in the **ReviewedReports** folder. Download the one with your UTEID.

**JDS297\_BeersLawReport\_Reviewed.docx**

1. After you have made your final revisions based upon the Peer Review comments on your Lab Report, you will re-name your Final version as:

**JDS297\_BeersLawReport\_022513\_FINAL.docx**

Then upload this file to the **DROPitTOme** site. Passwerd: virtual214

<http://www.dropitto.me/vdsclass>

**Note: be sure to go back and include the following info in the header of your final WORD document that was removed:**

UTEID and Name

VDS Spring 2013

Beer’s Law Lab Report - FINAL

With the corrected header – I will know which one to grade as the final report when I print them on paper.

You can delete the **Anonymous Reviewer Comments** and all editing marks for the Final submission.

NOTE: All things submitted by you will be through **DROPitTOme.**

All things downloaded by you will be on **BlackBoard**.

Below are the lab report guidelines for the Lab Report copied from the handout which you can use to help you review the paper.

See also the “**Lab notebook versus Lab report.doc**” on the Black Board site for additional guidelines.

**Original Lab Report Guidelines:**

~~\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*~~

**Length of Original Lab Report: 1,250 words**

**Introduction –** should include background information on spectroscopy and how it is used in research

**Objective –** put at end of the Intro paragraphs

• Hypothesis – 1-2 sentences

**Materials & Methods –** describe your procedures. Balance necessary items vs. being overly detailed. Significant equipment should include name (company, location).

**Results & Discussion -** Embedyour Maximal wavelength spectrum, your **data table** and final X-Y scatter plot **graph** into a Word or Writer document for your lab report. (These should not be sent as separate files). Include captions. There should also be paragraphs of text describing your results and then analyzing them.

**Conclusions** – summary of what you did and commentary on what the next step would be and/or how this fits in the big picture of what VDS does.

**References**: for any sources you used in your Introduction. But only need a few. Use ACS format and Number your Bibliography

~~\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*~~

**Format:** Your review will include written comments written directly on the paper in green/blue font (or various colors of highlighter). You can type directly in the paper – or put your comments after each question at the end of the paper in the **Anonymous Reviewer Comments** in green/blue font.

**FOR EXAMPLE:**

**Page 1, paragraphs 1-2:** The authors do not discuss the goals of the experiment at the end of the Intro, but do give a nice concise description of the literature that deals with absorbance spectroscopy .

**Page 2, paragraphs 1-4:** This section is confusing and jumps around. It is hard to follow the methods. The authors should re-order this discussion so that …..

**Page 3, paragraph 2:** the author does not clearly indicate the connection between the results herein and future applications. A good application of this work that could be addressed is ……

**Anonymous Reviewer Comments**

1. (1 pt.) *Format*: Is this report formatted correctly? Does it include all required sections: title page, introduction, materials and methods, results & discussion, Conclusion w/ future directions, references? If not, what is missing? Are the paragraphs justified to full width? Are there too many/few words? (not including references or captions)
2. (1 pt.) *Intro*: In the introduction, does the author explain the main concepts relevant to the lab? Name at least two concepts and state whether the author explained them sufficiently or not.
3. (1 pt.) *Objective:* Is there an objective at the end of the Intro? Usually the objective is not at the beginning – but rather background material is given first before the purpose of the lab is addressed. How could it be improved? Is the hypothesis too simplistic? Is it testable using this lab?
4. (1 pt.) *Order:* poor ordering of ideas. Could the flow be better to facilitate understanding?
5. (1 pt.) *Writing*: Is the writing clear, concise, and grammatically correct? Point out frequent misspellings, unclear sentences. As you read through the introduction, highlight all misspelled words, grammatical mistakes, incomplete sentences, subject-verb disagreement, or other grammatical problems. Make note of at least 3 errors here.
6. (1 pt.) *Methods*: By reading the materials and methods section, do you think you can reproduce one of the experiments? In other words, did the author list final concentrations, conditions, sources of materials...etc.? Mention at least one way in which this section could be improved.
7. (1 pt.) *Tense*: How many times does the author use first person pronouns such as “I” or “we” in describing the experimental procedures? (There should be none!)
8. (1 pt.) *Data*: Are all graphs/tables/figures labeled correctly? Should any be omitted? Should any be added? Numbered in the order of their appearance in the text? Are the legends (if necessary) and axes complete so that the meaning of the figure is clear? Are axes scaled to be clear – i.e. too many significant figures? There shouldn’t be a title on figures. Is there a figure caption that explains the graph? Captions should not start with ‘This image shows…..’ or ‘This is an image of …..’. Captions should not include any analysis – only description of experiment and data. Do they show (write out) the key equations for the lab? Not regular calculations though.
9. (1 pt.) *Discussion*: In the discussion section, does the author use complete, coherent, scientifically correct sentences to analyze the results obtained? Provide an example by highlighting a sentence in the text. Does the author just re-state the methods or do they actually provide insightful analysis? Is an error analysis included of factors that would lead to inaccuracies or reduced confidence in the data?
10. (1 pt.) *References:* Do they have ‘in-text’ citations at the end of sentences? Are the in-text citations correctly formatted? Are there at least 3 references? Does the first reference cited in the text correspond to the 1st reference in the Bibliography? The bibliography should not necessarily be alphabetical but rather by first usage. Is the bibliography correctly formatted? Are all of the papers in the bibliography cited in the text? Do they need more references based upon the information present?
11. (1 pt.) *Conclusions & Future Directions:* Does the author concisely re-capitulate what was done in the lab while emphasizing the most important result? Do you think the information in the “Future Directions” is specific enough to show their understanding of the work and its context within the research as a whole?
12. (1 pt.) List two things the author does well:
13. (1 pt.) List two things that the author needs to improve: